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				Application Number	10/625,073-Conf. #9446	
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S	TATEMENT E	3Y /	APPLICANT	First Named Inventor	Mark I. Greene	
_				Art Unit	1617	
	(Use as many sh	eets as	s necessary)	Examiner Name	L. M. Williams	
Sheet	1	of	1	Attorney Docket Number	20273/100K201-US2	

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite	Foreign Patent Document	Publication Date	Neme of Patentee or	Pages, Columns, Lines, Where Relevant Passages			
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	BA	WO-01/08699-A1	02-08-2001	THE TRUSTEES OF THE				
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				PENNSYLVANIA, et al.				

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July 22, 2003 Mark I. Greene 1653 (Use as many sheets as necessary) Examiner Name A. A. Mohamed of 1 Attorney Docket Number 04040/100K201-US2

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Document Number Number-Kind Code ² (#known)	Publication Date MM-00-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			

	FOREIGN PATENT DOCUMENTS								
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	No.1	Country Code ² -Number ⁴ -Kind Code ⁸ (if known)	MM-DD-YYYY	Applicant of Cited Document		76			
/LW/				Halkier et al.		Г			
/LW/	BB	WO-00/01349-A2	01-13-2000	Murali et al.					

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S	TATEMENT	BY A	APPLICANT	First Named Inventor	Mark I. Greene	
				Art Unit	1653	
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Sheet	1	of	3	Attorney Docket Number	4040/1K201US2	

				U.S. PA	TENT DOCUMENTS	
F	Examiner		Document Number	Publication Date	Name of Patentes or	Pages, Columns, Lines, Where
lugas.		Cite No.1	Number-Kind Code ² (Fknown)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
/LV	LW/ AA.		4,215,051	7/29/80	Schroeder et al.	
		AB.	4,946,778	8/7/90	Ladner et al.	
	Г	AC.	5,470,952	11/28/95	Stahl et al.	
	_	AD.	5,849,865	12/15/98	Cheng et al.	
1	7	AE.	5,955,425	9/21/99	Morley et al.	
	7	AF.	5,985,832	11/16/99	Roodman et al.	
1	W	AG.	5,869,452	2/9/99	Ng et al.	

		FOREI	GN PATENT	DOCUMENTS		_
Examiner	Cite	Foreign Patant Document	Publication	Name of Patentee or	Pages, Columna, Lines,	
Intials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁸ (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	
/LW/	AH	EP 0 045 665	5/8/81			
/LW/	ΑI	WO 98/53842	12/3/1998			г
/LW/	AJ	WO 99/58674	11/18/99			

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		NON PATENT LITERATURE DOCUMENTS				
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TLW/	AK					
	AL	Albericio et al., Int. J. Peptide Protein Res. 26:92-97, 1985	Т			
	AM	Anderson et al. Nature, Vol. 390, pp. 175-179, November 13, 1997	Т			
	AN	Banner et al., Cell, 73:431-445, May 1993	T			
	AO	Beutler et al., Science, 264:667-668, April 1994				
AP		Beutler et al., Annals of The New York Academy of Sciences, 730:118-133, 1994				
AQ		Bowie et al. Science, Vol. 247, pp. 1306-1310, 1990	T			
	AR	Brisson et al., Nature, 310:511-514, August 1984	T			
\neg	AS	Broglie et al., Science 224:838-843, May 1984	T			
	AT	Bucay et al., Genes Dev., 12(9):1260-1268, 1998	T			
	AU	Cole et al., Monoclonal Antibodies and Cancer Therapy, 77-96, January-February 1985	T			
_	AV	Coruzzi et al., The EMBO Journal 3(8):1671-1679	T			
	AW	Cote et al., Proc. Natl. Acad. Sci. USA, 80:2026-2030, 1983	٢			
17	AX	Döring et al., Molecular Immunology, 31(14):1059-1067, 1994	T			
\mathbf{A}	AY	Filvaroff, Current Biology, 8:R679-682, 1998	1			
/I W/	ΑZ	Fox et al. Biochem. Biphys. Res. Comm., Vol. 276, pp. 868-872, 2000	t			

Examiner	/Leonard Williams/ (08/28/2007)	Data
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PTO/SB/08a/b (05-03)
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				Art Unit	1653				
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Sheet	2	of	3	Attorney Docket Number	4040/1K201US2				

/LW/		Fingl et al., "General Principles," In: The Pharmacological Basis of Therapeutics, Chapter 1, 1-46, 1975							
	BB	Fuller, K., et al., "TRANCE is necessary and sufficient for osteoblastmediated activation of							
		bone resorption in osteoclasts," Database Chemical Abstracts on STN, No. 129:314804.							
		Abstract, J. Exp. Med., 1998, 188(5), 997-1001							
	BC	Gruss et al., Cytokines and Molecular Therapy 1:75-105, May 1995							
_	BD	Gurley, et al., Molecular and Cellular Biology, 6:559-565, February 1986							
_	BE	Habeeb, A.F.S.A., Analytical Biochemistry, 56:60-65, 1973							
+	BF Hann et al., J. Chem. Soc. Perkin Trans., 1, 307-314, 1982								
-	BG	Holladay et al. Tetrahedron Letters, 24(41):4401-4404, 1983							
+	BH	Houghten et al. Cell, Vol. 93, pp. 165-176, April 17, 1998							
+-	BI	Houghten et al., Vaccines 86, Cold Spring Harbor Laboratory, pp. 21-25, 1986							
+	BJ	Hruby et al., Life Sciences, 31:189-199, 1982							
+-	BK	Hudson et al. Int. J. Protein Res., 14:177-185, 1979							
+	BL								
-1-	BM	Huse, et al., Science, 246:1275-1281, December 1989							
+		Jennings-White et al., Tetrahedron Letters, 23(25):2533-2534, 1982							
-	BN	Kamber et al., Helvetica Chimica Acta, 63(Fasc. 4):899-915, 1980							
4	во	Kobayashi et al., J. Exp. Med., Vol. 191, No. 2, 275-285 , 2000							
4	BP	Köhler et al., Nature, 256:495-497, 1975							
┸	BQ	Kong et al., Immunology and Cell Biology, 77:188-193, January 1999							
	BR	Kong et al., Nature, 397:315-323, 1999							
	BS	Kornak et al., Cell, 104:205-215, 2001							
	BT	Kozbor et al., Immunology Today, 4(3):72-79, 1983							
	BU	Lacey et al., Amer. J. of Pathology, 157(2):435-448, 2000							
	BV	Li Y.P. et al., Nature Genetics, 23:447-451, 1999							
	BW	Li J. et al., PNAS, 97(4):1566-1571, 2000							
	BX	Livingstone, David M., Methods in Enzymology, Affinity Techniques, 723-731, 1974							
	BY	Logan et al., Proc. Natl. Acad. Sci. USA, 81:3655-3659, June 1984							
	BZ	Mackett et al., Proc. Natl. Acad. Sci. USA 79:7415-7519, December 1982							
	CA	Mackett et al., Journal of Virology, 49(3):857-864, March 1984							
	СВ	McOsker et al., J. Bone & Mineral Research, Twelfth Annual Meeting of the American Societ for Bone							
		and Mineral Research, 5(Supp 2):S105, No. 128, Abstract, Aug. 28-31, 1990							
-	CC	Moore et al., Techniques in Protein Chemistry VII, Marsak (ed.) 81-91, 1996							
+	CD	Morley, J.S., Trends Pharm. Sci., 463-468, December 1980							
+	CE Morrison et al., Proc. Natl. Acad. Sci. USA, 81:6851-6855, November 1984								
-	CF	Mortensen et al., J. Clinical Endrocrinology and Metabolism, 83(2):396-402, 1998							
	الحا	Nakagawa, N., et al., "RANK is the essential signaling receptor for osteoclast differentiation factor in osteoclastogensis" Database Chemical Abstracts on STN, No. 130:166173. Abstract.							
		Biochem. Biophys. Res. Commun., 1998, 253(2), 395-400							
+	СН	Neuberger et al., Nature, 312:604-608, December 1984							
	CI	Nicholson et al., J. Clinical Investigation, 78:355-360, August 1986							
+	CJ	Panicali et al., Proc. Natl. Acad. Sci. USA, 79:4927-4931, August 1982							
\mathbf{T}	CK	Peppel et al., J. Exp. Med., 174:1483-1489, December 1991							
(17	CL	Ponder et al., J. Mol. Biol., 193:775-791, 1987							
	CM	Scimeca, J.C., Bone, 26(3):207-213, 2000							
LW/	CN	Shalhoub, V. et al., British J. of Haematology, 111:501-512, 2000							
aminer		/Leonard Williams/ (08/28/2007) Date							
nature	٠	Considered							

PTO/SB/08a/b (05-03)
Approved for use through 05/31/2003. OMB 0551-0031
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	(use as many sh	ecis as	necessary)	Examiner Name	A. Mohamed	
Sheet	3	of	3	Attorney Docket Number	4040/1K201US2	

/LW/ Id	00	Shalhoub et al., J. Cellular Biochem., 72(2):251-261,1999	_
	CP.	Sietsema et al., Drugs Exptl. Clin. Res., XV(9):389-396, 1989	+
	ca	Simonet et al., Cell, 89(2):309-319, 1997	+
	CR	Singer et al., J. Clinical Endocrinology and Metabolism, 83(6):1906-1910, 1998	+
	S	Siris et al., J. Bone and Mineral Research, 13(6):1032-1038, 1998	+
	CT.	Smith et al., Journal of Virology, 46:584-593, May 1983	+
	CU	Spatola, A. F., Chemistry and Biochemistry of Amino Acids, Peptides, and Proteins, 7:267-357, 1983	+
	ZV	Spatola et al., Life Sciences, 38:1243-1249, 1986	+
	CW	Suda et al., Endocrine Reviews 20(3):345-357, June 1999	+
	CX	Suda et al., Novartis Found Symp, 232: 235, 2001 (Abstract)	+
	CY	Takamatsu et al., EMBRO Journal, 6(2):307-311, 1987	+
	ÇΖ	Takasaki et al., Nature Biotechnology, 15:1266-1270, 1997	+
)A	Takeda et al., Nature 314:452-454, 1985	+
)B	Tam et al., Synthesis, 955-957, December 1979	+
	5	Van Beek E., J. Bone and Mineral Research, 11(10):1492-1497, 1996	+
	D	Weitzmann et al., J. of Bone and Mineral Research, 16(2):328-337, 2001	+
	Œ	Williams et al., Immunology, 84:433-439, 1995	+
_ C)F	Wong et al. Journal of Leukocyte Biology, 65:715-724, June 1999	+
0	G	Yamaguchi et al., J. of Biological Chemistry, 273(9):5177-5123, Feb. 28, 1998	+
	ЭН	Yasuda et al. Proc. Natl. Acad. Sci. USA., Vol. 95 pp. 3597-3602, March 1998	+
W C		Zhang et al., Nature Biotechnology, 14:472-475, April 1996	+
/I W/IC)J	Zhang et al., Nature Biotechnology, 15:150-154, 1997	+

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

'Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is ettached.

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